

A. Claim 1

Applicant submits that claim 1 is patentable over the cited references. For example, claim 1 recites a detection means that detects a differential voltage between outputs from two power amplifiers. A decision means decides whether or not the differential voltage is larger than a prescribed voltage.

The Examiner acknowledges that Kalb fails to suggest the above features, but contends that Maehara does. In particular, the Examiner maintains that comparator 14A of Maehara suggests the claimed detection means (Fig. 3). In the September 10, 2003 Amendment, Applicant argued that comparator 14A does not determine a differential voltage between outputs of amplifiers 15A and 15B. Rather, Applicant argued that the comparator 14A determines the difference between a voltage V_a (at point A in Fig. 3) and a reference voltage V_{ref} (col. 6, lines 18-31).

In response, the Examiner maintains that Maehara refers to V_a as a “potential” and not a “voltage” at point A (pg. 12 of Office Action). However, Maehara repeatedly refers to the “potential” as a voltage. For example, in column 6, lines 20-23, Maehara discloses that an output voltage of the amplifying unit 15 is equal to an electric potential V_a at a point A.

Further, on page 12 of the Office Action, the Examiner maintains that comparator 14A has to know the difference between the two signals output from the amplifiers 15A and 15B in order to know about the level of the final output signal. However, Applicant submits that the Examiner’s statements contradict the express teachings of the reference. For example, Maehara fails to disclose that the comparator 14A “has to know” the difference between the two signals

output from the amplifiers 15A and 15B. Rather, as disclosed in the reference, “the electric potential V_a at the point A is always compared with the reference voltage V_{ref} by the comparator 14A, and the switching transistor SW12 is set to the “on” or “off” condition according to a high or low relationship of the electric potential V_a and the reference voltage V_{ref} .” (col. 6, lines 55-60). Thus, as stated in the September 10, 2003 Amendment, it appears that the comparator 14A does not determine a differential voltage between outputs of amplifiers 15A and 15B.

Nonetheless, the configuration of the amplifying circuit, as shown in Fig. 3 of Maehara appears to teach away from the Examiner’s assertion that the comparator 14A has to know the difference between the two signals output from the amplifiers 15A and 15B. For example, based solely on the schematic shown in Fig. 3, it appears that the comparator 14A adds the voltage of amplifiers 15A and 15B (i.e. the two plus signs where signals from amplifiers 15A and 15B enter the comparator 14A), and determines a differential value between the reference voltage V_{ref} and the sum of the amplifiers 15A and 15B. There is no disclosure that a “differential” voltage between the outputs from the amplifiers 15A and 15B is determined, whether it be prior to or upon entering the comparator 14A.

In addition, since there is no teaching or suggestion to detect a differential voltage between the outputs of the amplifiers 15A and 15B, there is likewise no suggestion in Maehara for deciding whether or not a differential voltage between the amplifiers 15A and 15B is larger than a prescribed voltage, as recited in claim 1.

Response under 37 C.F.R. § 1.116
U.S. Application No. 09/453,525

In view of the above, Applicant submits that claim 1 is patentable over the cited references. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection.

B. Claim 3

Since claim 3 is dependent upon claim 1, Applicant submits that such claim is patentable at least by virtue of its dependency.

C. Claim 9

Since claim 9 contains features which are analogous to the features recited in claim 1, Applicant submits that such claim is patentable for at least analogous reasons as presented above.

D. Claims 10-14 and 16

Since claims 10-14 and 16 are dependent upon claim 9, Applicant submits that such claims are patentable at least by virtue of their dependency.

II. Rejections under 35 U.S.C. § 103(a) in view of Kalb, Maehara and well known prior art

The Examiner has rejected claims 2, 4, 15, 17 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Kalb, Maehara and well known prior art. However, since claims 2, 4, 15, 17 and 21 are dependent upon claim 1 or claim 9, Applicant submits that such claims are patentable at least by virtue of their dependency.

III. Rejections under 35 U.S.C. § 103(a) in view of Kalb, Maehara and U.S. Patent No. 4414514 to Seki et al. ("Seki")

The Examiner has rejected claims 5-8 and 18-20 under 35 U.S.C. § 103(a) as being unpatentable over Kalb, Maehara and Seki.

A. Claims 5-8

Since claims 5-8 are dependent upon claim 1 and Seki fails to cure the deficient teachings of Kalb and Maehara, Applicant submits that such claims are patentable over the cited references at least by virtue of their dependency.

B. Claims 18-20

Since claims 18-20 are dependent upon claim 9, and Seki fails to cure the deficient teachings of Kalb and Maehara, Applicant submits that such claims are patentable over the cited references at least by virtue of their dependency.

Response under 37 C.F.R. § 1.116
U.S. Application No. 09/453,525

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Allison M. Tulino
Registration No. 48,294

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: February 12, 2004